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54 Title: Electrical surgical device

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The invention concerns an electrical surgical device. Such devices that are operated with high-frequency current are known, and use a passive electrode that possesses a broad face surface for contact with the surface of a patient's skin. For this, a high-frequency potential is established between an active electrode and the passive electrode. In this regard, it is important that the connections with the passive electrode remain uninterrupted so that the patient is not threatened by unintentional alternative high-frequency current return paths within the patient. Such unintentional alternative high-frequency current return paths can result in high-frequency burns to the patient's skin, or burns to operating-room personnel. Various systems have already been proposed in order to monitor the integrity of high-frequency current return paths of a passive electrode whereby operator's direct-current or low-frequency alternating current is used that pass through the patient under certain conditions.

[The drawings show...]

- Figure 1      a simplified schematic circuit diagram of a high-frequency electrical surgical device based on an embodiment example of the invention.
- Figure 2      a schematic circuit diagram of high-frequency electrical surgical device based on another embodiment example of the invention.

**Patent Claim 1:**

Protective device for an high-frequency (HF) electrical surgical device with a HF generator, an output line, and a return line, as well as coupling media for the connection of output line and return line with the HF generator, and coupling media for the connection of the output line with an active electrical surgical electrode as power supply to the active electrode, while coupling media are provided for the connection of a passive electrode with a return line,

characterized by

a return line device (427) providing an alternative path to connect the return line (418) with ground, whereby means are provided within the return-line device forming the alternative path to indicate a pre-determined HF return line in the return-line device forming the alternate path.

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